

L.A.R.C.
P.O. Box 2571
Thunder Bay, Ontario
P7B 5G1

APRIL
1992

Hi-Q

Journal of the Lakehead Amateur Radio Club

Meetings 2nd Thursday of every month - rm. 245 McIntyre Bldg. Confederation College - 7:30 P.M.

SUOMI NET

Matti VE3EEI announces a net for Finnish speaking Hams, although he explained that fluency in the language was not required.. The Suomi net will meet Mondays, Wednesdays and Fridays at 10:30 EST on 7235 Khz. Maybe if we all listen we can get the secret recipe for Hoito pancakes.

HAMFEST IN MAY

The Duluth Hamfest is scheduled for the 2nd of May, and the word on the street (on the air?) is that at least a couple of the Thunder Bay Hams have planned to attend. The hours are 9 a.m. to 1 p.m. and it's at the Coppertop Church. Thats at the top of the big hill on the way to Miller Hill

Addendum: Please add the following speed dials to your list for TBR.

*800 - OPP dispatch

911-Thunder Bay, all emergencies

(Fire, Ambulance, Police)

contrary to popular belief that is not a direct line to Robins.....Ed

SIX METER BEACON

VE3EEI would like to advise the 6 meter crowd of a beacon PJ2SIX. The beacon will operate 24 hours a day at 3 watts on 50.006 Mhz..

Students: What country is this beacon in and of what use is it?

STAY TUNED !

Terry, VE3TKA, has just advised us that there will be some significant changes to the BBS in the near future. The next Hi-Q will have an article describing the new changes to the software. While most of the changes affect the sysop, there will be some more options available to the user. More next month.

NORTHWEST DIRECTORY...

of amateurs is presently in production, and will soon be published. If you do not wish to have certain facts included (e.g. phone number, address, etc.) please contact Jim O'Brien VE3UA (623-7893) or leave a message on the packet BBS.

WELCOME ...

The Lakehead Amateur Radio Club would like to welcome the following new amateurs.

Tammy ... VE3XTK

Gary Adams ... VE3XSX

Harold Adams ... VE3XIC

Ann Droppo ... VE3ZZA

Bob Mullen ... VE3RRT

Glen Pressinger ... VE3ZGP

We welcome you all and hope that amateur radio is all that it you hoped it would be, and more.

A NEW NEWLETTER ...

While I'm slaving away, typing my fingers to the bone, Jim is perusing a new newsletter produced by our friends in Dryden and Ignace. Called Amateur Radio Northwest, it is specifically aimed at newly licenced amateurs, presently active on VHF. This newsletter is available by writing to Bob Mitchell VE3IDJ, P.O.BOX 246, Ignace, Ontario, P0T 1T0. No cost is mentioned except that donations are gratefully received. The first couple of issues look great, and are still available on request. They are also looking for articles, especially on how and why you got started in the hobby.

ECHOES FROM THE PAST....VE3AYZ

The following article originally appeared as the President's column in a 1971 issue of HI-Q. While the club membership was small back then, there was a lot of local activity in amateur radio.

THE PRESIDENT'S CHAIR

The resume below is to show our club activities which have taken place and mainly for those who are not members and would like to become Amateurs and join with us in our club programs.

THIS IS AN AMATEUR RADIO CLUB WHICH WAS FORMED IN 1934 AND ANY ONE WHO IS INTERESTED IN AMATEUR RADIO IS ELIGIBLE TO JOIN.

Our recorded membership stands at 32 of which 8 do not attend due to some being away from Thunder Bay or in work or otherwise which does not allow them to attend. At present we have 24 members with attendance varying from 12 to 20 members. Very few, if any clubs have 100% attendance at every meeting. Next September we plan to put on a membership drive. There is no need for us to be uptight about membership.

Our club year got under way September 1970 with the election of officers, and the following varied activities took place as follows:

October Club meeting at Lakehead University followed by a tour of the Electronics Lab. conducted by Jim Wheeler, VE3EEG,

November Dr. Geo. Clark, VE3ER, lecture on Bio Telemetry and animal tracking,

December Club dinner meeting Royal Edward Hotel, speaker Mr Stan Sumner, Area Manager Telecommunications, Department of Transport, Thunder Bay. Stan's topic was Telecommunications.

January Outline of forthcoming Simulated Emergency Test (SET) 1971 by VE3AYZ, EC Thunder Bay,

26th - VE3AYZ on Public Affairs CKPR-TV re SET 71, code classes and Thunder Bay award,

30th - SET 71, 16 Amateurs and 5 mobiles participating,

February Code classes commenced Feb. 1 at EMO building. Club tour of CKPR-TV radio; and

March Club business meeting. Technical talks by VE3EEW and VE3EDZ, VE3EEG, moved to April meeting.

Your executive held meetings on October 21, 1970; January 8 and March 19, 1971. My thanks to my executive who have helped organize and make these activities possible. Also, thanks to Bill Klemacki, VE3EEW and Jim Roberts, VE3EDC and others who have specially assisted in programming and administering the THUNDER BAY AWARD.

Our club must at all times look forward to finding ways to promote Ham Radio, in all its phases and especially in PUBLIC SERVICE through the AREC.

73, Les....VE3AYZ.

PHL'S DICTIONARY

Common Base Amplifier - also called a grounded base amp. A transistor amplifier in which the base element is common to both the input and the output circuits. It is comparable to the grounded grid configuration of a triode electron tube amplifier.

Daniell Cell - a cell having a copper electrode in a copper-sulfate solution and a zinc electrode in a diluted sulfuric acid or zinc-sulfate solution, with the two solutions separated by a porous partition. Generates a constant electromotive force of about 1.1 volts.

Dew Point - the temperature at which condensation first occurs when vapour is cooled.

Grid Current - the current which flows in the grid to cathode circuit of a vacuum tube. It is usually a complex current made up of several currents having a variety of polarities and impedances.

Induction Heating - the method of producing heat by subjecting a material to a variable electromagnetic field. Internal losses in the material then cause it to heat up.

Many Bridges Crossed..VE3AHD

I became interested in the radio hobby in 1934, thanks to my father and Walter Wastell VE3ADX the first amateur radio station in Fort Frances. My Dad ordered a "Silver Marshall" short wave regenerative receiver in kit form, from the 'States. The short wave receiver was powered by a dry battery pack. Using headphones, many hours were spent tuning and listening to code stations and short wave broadcast stations, KDKA Pittsburgh PA for one.

The next big project was building a superheterodyne short wave receiver. It was built breadboard style, using copper sheet to provide shielding and ground. The plug in coils and IF transformers were hand wound, and duco cement held the windings in place. The coils were wound following specs, schematics and pictorial diagrams, all provided with the receiver.

The IF transformers were wound on 1-1/4 x 3-1/2 inch fibre tubing. Using his small lathe, ADX assisted in winding the IFs. They were then mounted with their tuning device in a copper can. Power for the superhet was provided by a six volt wet battery with trickle charger, B batteries and bias C battery. The set was fitted for loudspeaker or headphone use.

I remember well, the arrival of an SWL card, confirming our reception of VK2ME a short wave radio station in Sydney, Australia.

I spent a lot of time at VE3ADX station with my father and soon became very keen on the amateur radio hobby, so much so, that I would get a licence and Dad would provide the where-with-all to build our rig. I started learning the code with assistance from ADX and finally got up to 10

wpm. My amateur certificate was issued by the Department of Marine. I received my Amateur licence VE3AHD in September 1935.

The transmitter was a 3 band (160, 80 and 40 meters) 160 Watt crystal controlled rig. The power supply, RF section, Class B plate modulator and speech amplifier were built in rack and panel design using 1 x 2 inch framing and 1/4 inch plywood panel. All sections were interconnected by cable harnesses, each fitted with appropriate plugs and sockets. The sections could easily be removed from the racks. The tube line up on the rig was 47 xtal. osc. and Taylor 210 buffer driving a Taylor 203A final. The speech amplifier consisted of the following tubes: 56, 57 and a pair of 46s driving four 46s push-pull parallel type Class B. The overall dimensions of the unit were approximately 24 x 24 x 72 inches.

The antenna was a 1/2 wave (cut for 160 Meters) end fed Zepp using 600 ohm feeder with 6 inch spacing. The feed line spreaders were 3/8 inch oak, and were boiled in wax for weatherproofing.

The receiver we used was a Sparton receiver (covering the broadcast band to 30 Megs), which had been fitted with an RCA BFO for CW.

A separate RF section was constructed for 20 and 10 meters, using the 40 meter crystal and twin triode 53, but replaced the T203A with a T53 final. A crystal for 20 and 10 meters was purchased later.

In the summer of 1936, what may be called, a mini Hamfest was held in Fort Frances with 5 or 6 hams in all, attending from Saskatchewan, North Dakota, Minnesota, Wisconsin and Michigan. My father and Walter ADX had a banner made and strung

across the main street in town welcoming the hams to our area. It was very nice to meet the fellows we had rag-chewed with so often from stations ADX and AHD. We all had a very enjoyable weekend.

In the winter of 1936-37 I attended the Commercial School of Telegraphy in Winnipeg for the purpose of obtaining my 2nd class ticket. Unfortunately, the school failed to live up to its obligations and closed. I studied by myself and wrote the 2nd class exam in Winnipeg. I submitted applications for employment in various locations without success and returned to Fort Frances. I was most fortunate in getting a radio operator job with the Ontario Forestry Branch at a Fire Ranger Station in Lac La Croix, located in Quetico Provincial Park. I felt like I was on top of the world, I had my first steady job paying \$90.00 per month and board yourself.

The radio equipment was housed in a ware house. The receiver was a battery operated regenerative set and the transmitter was a single tube master oscillator amplifier with an output of 100 watts. The power supply consisted of a 32 volt wet battery charged by a DC generator driven by a single cylinder model Z gasoline engine. A 32 volt motor, coupled directly to a 1,000 volt generator supplied the high voltage for the transmitter. The meter was controlled by a heavy, stepped rheostat.

My station call sign was CY5U, and there were about four other radio equipped Ranger Stations working into the central District Radio CZ5F at Fort Frances on an hourly schedule. It was a busy but enjoyable summer.

73s for now....Harry Wheeler, VE3AHD.

Prez Sez

Well spring is well on the way and the club has recently completed two more of the favorite annual events. First the Sibley Ski Tour which once again was a great success and the Annual Dinner which was held at Casey's Upstairs. Reports have it that the meal was very good however analysis of the English Trifle has not yet been completed. (Our contact in the forensic department tells us that these things take time.)

Everyone enjoyed the presentation by VE3GHB, Bruce Binny. His talk included his early involvement in radio communications and a summary of the development of electronics in the Department of Environment. He concluded with an open invitation to contact him for a tour of the weather office at the airport, but he requests that the size of your group be limited to four or five persons.

I had an opportunity to visit California during March and bring along my handheld. If you go, you better be sure to bring along a repeater directory, because in such a crowded place many repeaters have to be protected from accidental access by CTCSS (PL) tones and DTMF codes.

We have purchased a new battery for VE3YQT and also have a preamp for it. Once we have these installed and we check out the existing duplexers and antenna system (and get our own phone line) things will be all set for a trouble free summer of great communications.

Hope to see you at the next meeting if possible, we will have someone in

to give us a price on some club jackets, shirts, baseball hats etc.

73 for now de VUK

For those of us that need to improve our abilities for using code, the following W1AW Schedule is reprinted from QST magazine.

W1AW Schedule

October 27, 1991-April 5, 1992 MTWThFSSn = Days of Week Dy = Daily
W1AW code practice and bulletin transmissions are sent on the following schedule:

UTC	Slow Code Practice Fast Code Practice CW Bulletins Teleprinter Bulletins Voice Bulletins	MWF: 0300, 1400; TThS: 0000; Sn: 0300 MWF: 0000, 2100; TTh: 0300, 1400; S: 0300; Sn: 0000 Dy: 0100, 0400, 2200; M-F: 1500 Dy: 0200, 0500, 2300; M-F: 1600 Dy: 0245, 0545
EST	Slow Code Practice Fast Code Practice CW Bulletins Teleprinter Bulletins Voice Bulletins	MWF: 9 AM, 7 PM; TThSSn: 4 PM, 10 PM MWF: 4 PM, 10 PM; TTh: 9 AM; TThSSn: 7 PM Dy: 5 PM, 8 PM, 11 PM; M-F: 10 AM Dy: 6 PM, 9 PM, 12 AM; M-F: 11 AM Dy: 9:45 PM, 12:45 AM
CST	Slow Code Practice Fast Code Practice CW Bulletins Teleprinter Bulletins Voice Bulletins	MWF: 8 AM, 6 PM; TThSSn: 3 PM, 9 PM MWF: 3 PM, 9 PM; TTh: 8 AM; TThSSn: 6 PM Dy: 4 PM, 7 PM, 10 PM; M-F: 9 AM Dy: 5 PM, 8 PM, 11 PM; M-F: 10 AM Dy: 8:45 PM, 11:45 PM
MST	Slow Code Practice Fast Code Practice CW Bulletins Teleprinter Bulletins Voice Bulletins	MWF: 7 AM, 5 PM; TThSSn: 2 PM, 8 PM MWF: 2 PM, 8 PM; TTh: 7 AM; TThSSn: 5 PM Dy: 3 PM, 6 PM, 9 PM; M-F: 8 AM Dy: 4 PM, 7 PM, 10 PM; M-F: 9 AM Dy: 7:45 PM, 10:45 PM
PST	Slow Code Practice Fast Code Practice CW Bulletins Teleprinter Bulletins Voice Bulletins	MWF: 6 AM, 4 PM; TThSSn: 1 PM, 7 PM MWF: 1 PM, 7 PM; TTh: 6 AM; TThSSn: 4 PM Dy: 2 PM, 5 PM, 8 PM; M-F: 7 AM Dy: 3 PM, 6 PM, 9 PM; M-F: 8 AM Dy: 6:45 PM, 9:45 PM

Code practice, Qualifying Run and CW bulletin frequencies: 1.818, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 147.555 MHz.

Teleprinter bulletin frequencies: 3.625, 7.095, 14.095, 18.1025, 21.095, 28.095, 147.555 MHz.

Voice bulletin frequencies: 3.99, 7.29, 14.29, 18.180, 21.39, 28.59, 147.555 MHz.

Slow code practice is at 5, 7½, 10, 13 and 15 WPM.

Fast code practice is at 35, 30, 25, 20, 15, 13 and 10 WPM.

CW bulletins are sent at 18 WPM.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds. For example, "Text is from February 1991 QST, pages 9 and 81" indicates that the main text is from the article on page 9 and the mixed number/letter groups at the end of each speed are from page 81.

On Fridays, UTC, a DX bulletin replaces the regular bulletin transmissions.

On Tuesdays and Saturdays at 2330 UTC, Keplerian Elements for active amateur satellites will be sent on the regular teleprinter frequencies.

Teleprinter bulletins are 45.45-baud Baudot, 100-baud AMTOR, FEC mode and 110-baud ASCII.

W1AW is open for visitors Monday through Friday from 11 AM to 11 PM EST and on Saturday and Sunday from 4:30 PM to 11 PM EST.

If you desire to operate W1AW, be sure to bring a copy of your license with you. W1AW is available for operation by visitors between 1 and 4 PM Monday through Friday.

In a communications emergency, monitor W1AW for special bulletins as follows: voice on the hour, teleprinter at 15 minutes past the hour, and CW on the half hour.

W1AW will be closed on February 17, April 17 and May 25.